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Perceptions of Firm Quality: A Cause or Result of Firm Performance

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This article examines two issues regarding the formation and effects of qualitative perceptions of firm performance: First, do firm quantitative measures of performance influence perceptions of firm management quality? Second, do perceived firm qualities affect measures of firm financial performance? We examined data from Fortune *magazine's survey of corporate reputations as a source for measures of perceived firm quality. The results suggest that financial measures of both risk and return influenced perceptions of firm quality. Moreover, perceptions of firm quality, though correlated with the subsequent performance of specific financial performance measures, were generally more closely related to prior financial performance than to subsequent financial performance.*

Most of the literature on strategy and firm performance has implicitly assumed that firm and management quality influences a firm's future financial performance (e.g., Leiberson & O'Conner, 1972; Weiner & Mahoney, 1981). First, relatively skilled managers may make better decisions. Second, firms perceived as excellent along an array of dimensions may have easier access to the financial capital necessary to facilitate future firm growth. In fact, Louis Harris and Associates (1975) found that major institutional investors considered the quality of management to be the single most important criterion in the selection of stocks. Third, finance theory has recently devoted considerable attention to signaling theory, the means by which firms signal investors of actions or strengths without revealing specific strategic information regarding future plans (Ross, 1977). Strong management, or managerial strength in specific areas (e.g., innovation), may be interpreted as a signal of future high financial performance.

If perceptions of firm quality enhance the ability of firms to obtain lower costs of capital, to increase investor interest, or to signal to the public future expected

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performance, a high perception of firm and/or management quality may be correlated with future reported measures of financial performance. Staw, McKechnie, and Puffer (1983), for instance, found that presentation of financial performance in a way that "enhanced" evaluations of the firm and management was often associated with subsequent increases in stock market performance.

A strong positive relationship between current perceptions of firm quality and future financial performance, however, is not certain. Although some perceptions of firm quality may affect future financial performance, certain measures of firm quality may have little necessary relationship with many measures of financial performance. Firms must respond to multiple constituencies with varied interests, including non-financial performance criteria (Cameron & Whetten, 1983). For instance, the perception of the quality of management may be an important characteristic in satisfying these constituencies who desire "quality" managers, but who do not require immediate financial performance. In fact, Chakravarthy (1986) found that perceptions of "excellence" could not be explained by financial performance. This finding led him to suggest that certain dimensions of firm performance (e.g., management quality) may be of concern to important firm constituencies and that these non-financial dimensions of firm performance may not be directly related to firm financial performance. Moreover, previous empirical tests on the relationship between perceptions of firm performance and firm financial performance may differ at least in part because management decisions and firm strengths do not contribute equally to firm financial success or can contribute in different ways (McGuire, Schneeweis, & Hill, 1986). Woo and Willard (1983) have identified clusters of performance variables tapping different aspects of performance, such as market position, sales, and cash flow. Specific management or firm characteristics may have differing influences on each of these various financial performance dimensions. It is also possible, however, that firm financial performance affects perceptions of management and firm quality and not that perceptions of firm quality affects measures of financial performance.

Recent interest in interpretive views of organizational strategy has suggested an additional role for perceptions of management and firm quality in affecting firm financial decisions. Smircich and Stubbart (1985), Pfeffer (1981) and others have argued that managers and strategists interpret and create their own environment. If financial performance is an important criterion in perceptions of management quality, managers may be encouraged to manipulate financial variables to enhance management quality. In fact, several studies (Bettman & Weitz, 1983; Salancik & Meindel, 1984; Staw, McKechnie, & Puffer 1983) have found that firms present firm financial performance in a way that enhances perceptions of firm quality. Findings (Brown, 1982) that poor financial performance often results in leadership change supports the argument that financial performance may affect perceptions of management quality.

Moreover, the literature on leadership attribution (e.g., Calder, 1977; McElory, 1982; Lord & Smith, 1983; Pfeffer, 1977; Phillips & Lord, 1981) suggests evaluations of leadership are the result of attribution processes. Consequently, firm financial performance along critical dimension may influence perceptions of leadership or managerial quality. Such attribution processes may be particularly

relevant to the context of management quality where the reasons for firm or managerial success are ambiguous (Pfeffer, 1977). Strong performance may be taken as evidence of effective management. Despite attempts by management to avoid blame for poor performance (discussed earlier), several studies of management turnover have found that management may become a scapegoat when performance falls (Brown, 1982; Gamson & Scotch, 1964; Reinganum, 1985).

The *Fortune* survey lends support to the perspective that financial performance leads perception. In 1985, the median return on investors' equity of the 10 firms ranked most highly by *Fortune* magazine's annual survey of corporate reputations was 11.5%, well above the *Fortune* 500's median of −.75%. The bottom 10's median return was −39.8%. Indeed, profits provide the most obvious path to admiration. The 1985 top 10 rated firm's return on shareholder equity was 20% in 1984, compared with five of the least admired who lost money, and the median return of 6.8% for the remaining five (*Fortune*, 1986).

The relation between subjective evaluation of management or firm qualities and objective measures of firm financial performance also has methodological importance for strategy research. Subjective measures of firm performance or managerial expertise are inevitably open to question. However, objective measures of performance for privately held firms or organizational sub-units may be difficult to obtain. Specific aspects of firm performance may also be difficult to assess through readily available objective data. For these and other reasons researchers frequently use subjective measures of firm performance (Dess & Robinson, 1984). Consequently, the relationship of such subjective matters to objective measures is of methodological concern. Likewise, attribution theory suggests that the availability of information regarding outcomes and the perceived salience of these outcomes also influences the attribution process (Lord & Smith, 1983; Phillips & Lord, 1981). Several indexes of firm financial performance are widely circulated [e.g., stock price, return on investments, (ROI)] and may therefore have greater relationship with perceived management quality than other variables (e.g., sales growth) used in management studies.

In this study we examine the relation between perceptions of firm performance using results obtained from the *Fortune* magazine survey of corporate reputations and traditional measures of firm financial performance. We address the two major issues discussed earlier: (a) the degree to which perceived firm or management quality influences subsequent firm financial performance, and (b) the degree to which historical measures of firm financial performance forecasts future perceptions of firm or management quality. We also examine the degree to which various accounting and/or market-based financial variables have a greater relationship with perceived firm and management qualities.

Data and Methodology

Data on perceptions of firm quality were obtained from *Fortune* magazine's annual survey of corporate reputations for 1983. This survey, published yearly since 1983, covers the largest firms in 31 industries.[1] Data were obtained from a

[1]The 1983 surveys were conducted in the fall of 1982.

survey of 8,000 executives, directors, and corporate analysts selected from a list compiled by *Fortune*. Respondents were asked to rate the 10 largest companies in their industry (for analysts, the industry they follow) on eight firm attributes: quality of management; quality of products and services; innovativeness; long-term investment value; financial soundness; ability to attract, develop, and keep talented people; community and environmental responsibility; and use of corporate assets. An overall score was also computed by averaging firm ratings over the eight dimensions. Firms were ranked on a scale of 0 (poor) to 10 (excellent). The response rate was 51% (*Fortune*, 1983). *Fortune* is one of the most comprehensive and widely circulated surveys of managerial attributes available. Both the quality and number of respondents is comparable or superior to the "expert panels" usually gathered for such purposes. Dess and Robinson (1984) used top corporate executives evaluation of their firm's performance. Evaluations of firm performance in the area of corporate social responsibility have used MBA students (Alexander & Bucholtz, 1978; Vance, 1975), and the evaluation of single "experts" (Moskowitz, 1972; Vance, 1975).

Accounting and market measures of firm performance were obtained from the COMPUSTAT and CRSP data bases. They include alpha, beta, residuals, return on assets (ROA), debt/assets ratio, average assets, income growth, sales growth, operating leverage, assets growth, and operating income growth.[2] These indexes covered two separate time periods: 1982-1984 ("post survey") and 1977-1982 ("pre-survey"); 131 firms were included in the analysis, for which complete *Fortune* survey and financial data were available. Relations between quality perceptions and prior and subsequent financial performance were assessed by correlation and regression analysis.

Results: Correlation Analysis

The initial results of this analysis are presented in Tables 1-3. Table 1 examines relations among the eight dimensions of perceived firm performance as identified in the *Fortune* study. The correlations demonstrate the high interrelation of these eight dimensions of qualitative firm performance.[3] The seven variables had an average intercorrelation of .75. Only one variable, social responsibility, had a significantly lower average correlation (.67).

Table 2 contains the correlations between prior financial (accounting and market) performance and subsequent qualitative evaluations of firm quality. Several relations should be noted. First, certain accounting-based performance indexes are strongly correlated with subsequent evaluations of firm quality. Both low debt/assets ratios and high ROAs for period 1977-1981 are associated with subsequent high firm evaluations along all reported dimensions. In contrast, neither

[2]Alpha, beta (slope), and residuals are derived from the traditional market model regression format of monthly security returns on the market index (S&P 500). ROA, debt/asset ratio, average assets ... are often used in management studies as the basis for accounting based performance measures. See Reinganum (1985) and McGuire, Schneeweis, and Hill (1986) for full explanation of market based and accounting based performance measures.

[3]Factor analysis (available from the authors upon request) showed that the seven elements of "quality" could be expressed as a single "quality" element.

Table 1
Correlation Matrix of Perceptions of Firm Quality

	1	2	3	4	5	6	7	8	9
1. Quality of Management	1.000	.821	.858	.884	.764	.912	.597	.931	.932
2. Quality of Product	.821	1.000	.836	.810	.725	.870	.775	.795	.902
3. Innovation	.858	.836	1.000	.790	.658	.875	.614	.823	.883
4. Long-term Investment Value	.884	.810	.790	1.000	.895	.939	.679	.911	.954
5. Financial Soundness	.765	.725	.658	.895	1.000	.867	.712	.843	.897
6. Ability to Attract People	.912	.870	.875	.939	.867	1.000	.752	.914	.979
7. Social Responsibility	.597	.775	.614	.679	.712	.752	1.000	.552	.782
8. Use of Corporate Assets	.932	.795	.823	.911	.843	.914	.662	1.000	.949
9. Average Quality Rating	.932	.902	.883	.954	.897	.980	.782	.949	1.000

sales growth nor operating income growth show any significant relation to the qualitative evaluations of firm performance.

The fact that ROA and debt/asset ratios are two of the most easily obtained and widely circulated of firm financial performance measures may help explain these results. Consistent with attribution theory, these relatively available measures weighed heavily in evaluator's minds. Although firms with high ROA and low debt/assets were considered successful, growth in sales and operating income were not significantly related to any of the subsequent reported qualitative performance indexes of quality. Evaluators appear to have been less willing to attribute growth in sales and operating income to management and therefore firm quality. Another reason for the failure of certain accounting based performance variables to be associated with subsequent evaluations of firm qualitative performance is that market-based risk/return measures may be more important factors in evaluations of management or firm quality. Clearly, market-based risk/return measures are less subject to managerial manipulation than are accounting measures (Branch, 1986). Moreover, as suggested earlier, certain financial performance variables may have close association with only specific firm quality measures. Beta (a measure of a firm's systematic risk) was not significantly correlated with the evaluations of a firm's management success for all quality variables. It was, however, significantly negatively correlated with the perceived financial soundness variable. The lower a firm's beta (less systematic risk) the more sound the firm was perceived to be. The perceived risk/performance relationship is also evident in the significant negative correlation between residual error and five of the eight qualitative dimensions (quality of management, quality of product, investment value, ability to attract people, social responsibility). Residual error measures the firm's unsystematic risk. Firms with high residual variability in security returns (after removal of general market factors) were perceived of as highly risky and of low quality across several key firm areas (e.g., quality of management, quality of product, investment value, attract people, social responsibility, average quality).

Table 2
Correlations Between Perceptions of Firm Quality and Prior Firm Financial Performance

	Quality of Management	Quality of Product	Innovation	Investment Value	Financial Soundness	Attract People	Social Responsibility	Use of Assets	Average Quality Rating
Debt/Assets	−.308**	−.336**	−.223**	−.453**	−.570**	−.418**	−.494**	−.410**	−.444**
ROA	.355**	.334**	.317**	.394**	.418**	.492**	−.472**	.419**	.441**
Average Assets	.057	.067	.002	.066	.116	.071	.119	.015	.066
Sales Growth	.087	.106	.131	.087	.087	.120	.110	.087	−.062
Operating Leverage	−.013	.027	.065	.099	−.155	−.041	−.138	−.085	−.082
Asset Growth	.086	.106	.131	.087	.087	.120	.110	.087	.111
Operating Income Growth	−.013	.027	.065	−.099	−.155	−.041	−.020	−.062	−.062
Beta	−.062	−.164	.042	−.121	−.224**	.094	−.342**	−.121	−.136
Alpha	.367**	.329**	.382**	.466**	.426**	.427**	.206**	.469**	.428**
Residuals	−.231**	−.273**	−.054	−.341**	−.454	−.280**	−.450**	−.288	−.326**

*Significance = .05. **Significance = .01.

Although high firm risk is reflected in low overall firm quality evaluations, high security return (as high accounting returns) is reflected in high quality evaluations. A firm's alpha (return in excess of that due to general market movements) is positively correlated with all eight of its qualitative dimensions. In short, high ex post excess risk-adjusted returns lead evaluators to view the firm as high quality in all dimensions. These results imply that evaluators considered both risk and return in forming their evaluations.

A second question, however, is whether perceived management qualities help explain future firm financial performance. Table 3 contains the correlations between 1982 measures of firm quality and actual firm financial performance during the 1982-1985 period. As in Table 2, a high positive correlation is found between all firm quality perceptions in 1982 and ROA in the following 3-year period. Similarly, a high negative correlation is evident between all measures of perceived firm quality and an accounting measure of firm risk (debt/assets ratio). These results are not surprising. Accounting returns are highly correlated between periods. Moreover, managers may use some accounting techniques to smooth their reported earnings. Thus, a firm with high relative ROA in past periods (and a high quality rating) may well be able to carry over high reported profits into succeeding periods. Although managers may be able to manipulate profit reports, they have less ability to change either the firm's asset or debt structure rapidly. As a result, the negative relation between debt/asset ratio and perception of firm quality is consistent between pre- and post-survey periods.

Table 3's results, however, do differ in important respects from those of Table 2. First, in contrast to pre-survey results, most measures of perceived firm quality are significantly correlated with subsequent sales growth and income growth. Of the accounting performances indexes used, sales and operating income growth are little affected by previous decisions on firm financial structure and may, therefore, be more responsive to managerial actions.

Also, in contrast to Table 2, a firm's alpha for the period 1982-1985 is not correlated with perceived firm quality in 1982. These results are consistent with other studies (Grannatelli & Martin, 1984) that imply that perceived firm quality cannot be used to obtain excess security returns. Unexpected security return is largely the result of unexpected changes in firm profitability. If stock market investors fully anticipated firm profits and quality, excess returns would not result from investing in high quality firms. Moreover, though evaluators may have considered highly publicized market performance measures in their evaluations of firm quality measures, management's ability to influence these security market based performance indexes is more constrained than for management produced accounting numbers.

Results: Regression Analyses

Correlation merely reflects the associations among variables taken two at a time. Regression analyses were also conducted to study the overall relationship between financial performance measures and perceptions of firm and management quality. Although multicollinearity makes individual variable coefficients difficult to interpret, overall equation results are meaningful. Accordingly, we

Table 3
Correlations Between Perceptions of Firm Quality and Subsequent Firm Financial Performance

	Quality of Management	Quality of Product	Innovation	Investment Value	Financial Soundness	Attract People	Social Responsibility	Use of Assets	Average Quality Rating
Debt/Assets	−.189**	−.279**	−.128*	−.325**	−.467**	−.315**	−.505**	−.276**	−.340**
ROA	.374**	.404**	.336**	.506**	.603*	.513**	.532**	.447**	.512**
Average Assets	−.009	.016	−.099	.001	.000	.147	.147	−.080	.006
Sales Growth	.323**	.329*	.396**	.373**	.306	.396**	.128	.343**	.361**
Operating Leverage	.130	.170	.136	.159	.197	.176**	.232**	.194*	.190*
Asset Growth	.285**	.279**	.365**	.317**	.212*	.343**	.113	.279*	.303**
Operating Income Growth	.379**	.277**	.370**	.477**	.403**	.429**	.133	.438**	.404**
Beta	.040	−.053	.100	.050	−.115	.028	−.193	−.017	−.109
Alpha	−.072	−.105	−.111	−.129	−.013	.118	.009	−.048	−.080
Residuals	−.160	−.137	−.020	−.275**	−.119*	−.119*	−.289**	−.199*	−.224**

*Significance = .05. **Significance = .01.

proceed to explore the relationships between financial performance and perceived firm and managerial quality in a regression framework.

Two measures of management quality were used on this analysis. The first was an overall index composed of the average of the survey dimensions. The overall index was chosen because several of the dimensions reflect several important aspects of managerial quality (e.g., innovativeness, ability to retain personnel, wise use of assets). The second index focused specifically on perceptions of management quality. The results are presented in table 4A (overall quality) and table 4B (management quality). The analysis was conducted in two stages. First, prior financial performance (equations 1 and 5) and subsequent performance (equations 2 and 6) were used to explain perceptions of managerial and overall quality. As would be expected, the multivariate model explains more of the variability in overall quality than do the individual variables taken separately.[4]

We focus first on Table 4A, Equation 1, in which prior financial performance variables are used to explain average quality. Equation 1 has an adjusted R^2 of .424 and, therefore, a multiple R of .684. This compares with highest univariate correlations of $-.444$ for the debt/asset ratio and .441 for ROA. Although care must be used in interpreting individual coefficients, these two variables also had the highest coefficients in the regression equations. This finding again suggests that evaluators considered these readily available measures of risk and return in their assessments of management quality. Similarly, Equation 2, has an adjusted R^2 of .381. Equation 2 has a multiple of .655, which compared with a correlation coefficient of .340 and .512 for debt/assets and ROA consider separately. Thus, taken together, the financial performance variable explain more of the average quality variability than can any of the variables taken separately. These results are not surprising. Even highly correlated financial performance measures reflect somewhat different dimensions of performance.

The predictive value of prior and subsequent performance declines when the management quality dimension is used as the dependent variable (Table 4B) instead of average quality. When prior financial performance is regressed on management quality (Equation 5), the multiple adjusted R^2 is .226, as compared to the adjusted R^2 of .424 in Equation 1. When subsequent financial performance is used (equation 6), the adjusted R^2 is .214 as compared to the adjusted R^2 of .381 in Equation 2. These results suggest that evaluators viewed financial performance as less strongly linked to perceptions of the quality of management than to perceptions of overall firm quality. These regressions do not, however, adequately address the incremental extent to which perceived management quality contributes to firm performance (beyond that which might have been expected given prior performance). Moreover, since pre- and post-performance measures are highly correlated, examination of the relationships between prior and subsequent financial performance and perceptions of firm quality is difficult. An ap-

[4]In equations in Table 4a and 4b, subsequent measures of financial performance are often used as the independent variables in regressions with prior perceptions of firm quality as the dependent variable. This form of regression does not imply that the independent variables are the causal factors (e.g., future forecasts past). The regression indicates the overall correlation between perception of quality and subsequent financial performance. The equations do provide a statistical relationship from which one can infer the effect of perceptions of quality on subsequent financial performance variables.

Table 4(a)
Regressions on Average Firm Quality Rating

Variable	F	Sig.	Mult R	R^2	Simple R
Equation 1: Independent Variables: Prior Performance					
Debt/Assets	8.034	.005	.444	.197	−.444
Sales Growth	.553	.459	.450	.203	.111
Beta	2.544	.113	.455	.207	−.136
Alpha	27.761	.000	.585	.342	.429
Average Assets	7.679	.006	.632	.400	.066
ROA	9.018	.003	.653	.426	.440
Operating Income Growth	.224	.637	.657	.432	−.062
Residuals	7.221	.008	.681	.464	−.326
Operating Leverage	.223	.637	.682	.465	−.062
Asset Growth	.552	.459	.684	.468	.110
Adjusted R^2 = .424; Overall F = 10.553; Significance = .000					
Equation 2: Independent Variables: Subsequent Performance					
Beta	.245	.621	.019	.000	−.019
Average Assets	.621	.432	.020	.000	.006
ROA	8.400	.004	.515	.265	.513
Operating Income Growth	3.497	.064	.603	.364	.404
Residuals	3.433	.066	.625	.391	−.224
Operating Leverage	.146	.703	.625	.391	.190
Asset Growth	.117	.733	.636	.403	.302
Alpha	.767	.383	.638	.406	−.080
Debt/Assets	2.428	.122	.646	.418	−.340
Sales Growth	2.175	.143	.654	.428	.360
Adjusted R^2 = .381; Overall F = 8.992; Significance = .000					
Equation 3: Independent Variables: Subsequent Performance Dependent Variable: Equation 1 Residuals (Prior Performance)					
Beta	.116	.734	.080	.006	.080
Average Assets	1.520	.220	.138	.190	−.115
ROA	.013	.909	.147	.022	.049
Operating Income Growth	.095	.758	.237	.056	.212
Residuals	.823	.366	.244	.059	−.045
Operating Leverage	.082	.775	.246	.061	−.003
Asset Growth	.027	.871	.258	.667	.174
Alpha	.003	.955	.259	.067	−.059
Debt/Assets	.033	.856	.260	.067	.011
Sales Growth	1.716	.191	.284	.081	.229
Adjusted R^2 = .000; Overall F = 1.053; Significance = .404					
Equation 4: Independent Variables: Prior Performance Dependent Variable: Equation 2 Residuals (Subsequent Performance)					
Debt/Assets	.066	.798	.067	.005	−.067
Sales Growth	2.657	.106	.093	.009	.070
Beta	.116	.734	.138	.019	−.115
Alpha	6.733	.011	.227	.051	.175
Average Assets	.721	.398	.234	.055	.043
ROA	.159	.690	.234	.055	.092
Operating Income Growth	1.590	.210	.276	.076	.107
Residuals	.914	.341	.286	.082	−.130
Operating Leverage	1.588	.210	.319	.102	.106
Asset Growth	2.657	.106	.348	.121	.069
Adjusted R^2 = .048; Overall F = 1.656; Significance = .099					

parent relation in one direction may simply be a proxy for a true relationship in another direction. Equations 3, 4, 7 and 8 in Table 4b represent an attempt to deal with this problem. The dependent variables of these equations are the residuals from the previous equations (equations 1, 2, 5, and 6). The independent variables

Table 4(b)
Regressions on Quality of Management

Variable	F	Sig.	Mult R	R^2	Simple R
Equation 5: Independent Variables: Prior Performance					
Debt/Assets	9.247	.003	.308	.095	−.308
Sales Growth	3.288	.072	.314	.004	.089
Beta	.433	.512	.316	.100	−.088
Alpha	22.058	.000	.453	.206	.367
Average Assets	6.252	.014	.490	.240	.057
Operating Income Growth	.368	.545	.493	.243	−.013
Residuals	2.066	.153	.504	.254	−.231
Operating Leverage	.368	.545	.510	.260	−.013
Asset Growth	3.288	.072	.529	.280	.087
Adjusted R^2 = .226; F = 5.224; Significance = .000					
Equation 6: Independent Variables: Subsequent Performance					
Beta	.854	.357	.039	.002	.039
Average Assets	.087	.769	.040	.002	−.009
ROA	5.571	.020	.383	.146	.374
Operating Income Growth	3.532	.063	.491	.241	.379
Residuals	1.270	.262	.506	.256	−.160
Operating Leverage	.006	.939	.506	.256	.130
Asset Growth	.295	.588	.515	.265	.285
Alpha	.949	.332	.521	.271	−.072
Debt/Assets	.133	.716	.522	.271	−.188
Sales Growth	.379	.539	.524	.274	.323
Adjusted R^2 = .214; F = 4.538; Significance = .000					
Equation 7: Independent Variables: Subsequent Performance; Dependent Variable: Equation 1 Residuals (Prior Performance)					
Beta	.432	.512	.104	.011	.104
Average Assets	.968	.327	.141	.011	−.098
ROA	.030	.862	.142	.020	.010
Operating Income Growth	1.076	.302	.251	.063	.227
Residuals	.636	.427	.260	.068	−.051
Operating Leverage	.326	.569	.265	.071	−.032
Asset Growth	.028	.867	.269	.073	.153
Alpha	.004	.952	.270	.073	−.059
Debt/Assets	.268	.606	.274	.075	.064
Sales Growth	.101	.751	.275	.076	.182
Adjusted R^2 = .000; F = .983; Significance = .462					
Equation 8: Independent Variables: Prior Performance; Dependent Variable: Equation 2 Residuals (Subsequent Performance)					
Debt/Assets	.051	.821	.057	.003	−.057
Sales Growth	4.919	.028	.076	.006	.054
Beta	.177	.674	.131	.017	−.118
Alpha	4.734	.032	.185	.034	.124
Average Assets	.516	.474	.189	.036	.034
ROA	.318	.574	.192	.037	.097
Operating Income Growth	1.267	.263	.255	.065	.115
Residuals	.711	.401	.264	.270	−.115
Operating Leverage	1.265	.263	.299	.089	.115
Asset Growth	4.919	.026	.354	.125	.054
Adjusted R^2 = .052; F = 1.717; Significance = .0842					

are prior and post-firm performance. Thus, equations 3 and 7 use subsequent performance variables to explain that part of the average perceived quality and management quality variability left unexplained by equations 1 and 5 (prior performance variables). Equations 4 and 8 use previous performance variables to

explain that part of average quality and management quality left unexplained in equations 2 and 6 (subsequent performance).

None of the equations has a very high explanatory power. After the first pass (equations 1 and 2; 5 and 6) the remaining variability is difficult to explain. As with the previous equations, the overall rating and the quality of management questions gave similar results; the explanatory value with the overall quality measure was higher than with the management quality variable. When the overall measure of quality is used, equation 1 (previous performance) has the highest adjusted R^2 and its corresponding equation 3 the lowest (zero). The same pattern also emerges when perceptions of management quality is used as the dependent variable. The adjusted R^2 of equation 7 is zero. This result implies that once previous performance has been used to explain management quality, post performance has no additional explanatory power.

Equation 2 and 4 results contrast with those of equations 1 and 3. Although not high, equation 4's adjusted R^2 of .048 is significant at the 10% level. Similarly, the adjusted R^2 of equation 8 is .052, which is also significant at the 10% level. Thus, after removing the impact of past performance, prior performance can add some explanatory power. The implication of this result is fairly obvious. Average quality and the quality of management are largely a function of past performance, and its apparent relation to post performance is a result of the relation between previous and post performance.

Discussion

These results suggest two conclusions. First, perceptions of overall firm quality reflect previous risk and return characteristics. However, these evaluations provide little information about the firm's future prospects beyond that which could already be anticipated by prior performance. They add little to knowledge of past performance as predictors of future performance. These results are congruent with an attribution theory perspective: that is, evaluators attribute prior financial performance to perceptions of management and firm quality.

Second, evaluations specifically of "management quality," had generally lower predictive value than the overall index. This suggests that the strength of the quality/performance relation was stronger when evaluators focused on the actions or policies set by the management team (e.g., innovation, financial soundness, use of assets) rather than on the quality of management in the abstract.

Implications For Strategic Management

This study has two principal implications for corporate managers. First, while no strict causal relationship can necessarily be implied, both high return (accounting and market) and risk measures are highly correlated with subsequent high firm image across several criteria. To the degree that high firm image is correlated with high financial performance, then both lowering the risk character of a firm and improving its profitability may enhance firm image. Growth in sales or operating income, in contrast has little impact on future evaluations of firm or management quality. However, though a causal relationship is difficult to establish, subsequent firm sales and operating income growth were significantly cor-

related with past perceptions of management quality. This finding suggests that management image or management actions may have an impact on those financial measures most immediately affected by managerial actions. This sales performance does not, however, necessarily imply excess security market performance. Management must perform even better than anticipated to generate excess market returns. Little correlation was found between perceived firm quality and a firm's future excess market return. This finding is consistent with market efficiency. Only unexpected changes in information (e.g., profit) lead to abnormal (positive or negative) market return.

Perhaps more interesting, though previous periods' firm return and risk may create or support an image in evaluators' minds, firm evaluation has little value as a forecaster of future firm financial performance. Prior financial performance was more strongly linked to evaluations of firm quality than was subsequent quality. Moreover, overall perceptions of firm quality were more closely associated with firm financial performance than were more specific perceptions of management quality. Contrary to the views of previous authors (Harris et al., 1975; Reinganum, 1985; Staw, McKechnie, & Puffer, 1983), this study also finds little evidence that the quality of management is an important variable in explaining or predicting future market-based financial performance.

Also of concern to our understanding of management quality is the strong links between all indexes of perceived quality. One might hope for a greater discrimination among perceived quality variables for firms. Dess and Robinson (1984) have suggested that qualitative indexes of firm performance can be used as surrogates for objective performance measures. Although the present findings support the close association between subjective and objective measures of performance, they suggest that subjective measures more closely reflect assessments of overall performance, rather than performance along specific dimensions. The carryover effect lessens the reliability of the evaluations for any one variable. Future tests of the relationship between firm quality and firm financial performance should further examine individual variable links and differences.

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